

SYSTEM AND METHOD FOR CROSS-DOMAIN SERVICE INVOCATION

ABSTRACT

A system and method whereby a client can transfer data to a service on the same or another protection domain and obtain a handle to it, the handle being defined as any mutually agreed-upon token that refers to the data, and which is usually much shorter than the data. The handle may then be passed to a service in lieu of again transferring the data. For example, in the case of a client sending the same data to multiple destinations, the invention allows the data to be transferred from the client protection domain to the service protection domain once using the data transfer operation. The client can then call the communication service any number of times by passing a handle to the instance of the data in the service protection domain, thus obviating the need to repeatedly transfer the data between the client and the service. An alternative embodiment allows the client to aggregate service invocations which are to operate on common data and to transfer a composite service invocation to a service domain using the data handle. The invention can be applied among local entities within one protection domain, between two protection domains at one location, between remote protection domains, across networks, between clients and routers, etc.